

549,603

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau(43) International Publication Date
18 November 2004 (18.11.2004)

PCT

(10) International Publication Number
WO 2004/099370 A2

- (51) International Patent Classification⁷: C12N
- (21) International Application Number:
PCT/US2004/013257
- (22) International Filing Date: 28 April 2004 (28.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/467,315 30 April 2003 (30.04.2003) US
- (71) Applicant (for all designated States except US):
GENECOR INTERNATIONAL, INC. [US/US];
925 Page Mill Road, Palo Alto, California 94304 (US).

- (74) Agent: BOYD, Victoria, L.; GENECOR INTERNATIONAL, INC., 925 Page Mill Road, Palo Alto, California 94304 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG.

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): JONES, Brian, E.
[GB/NL]; Gravin Juliana van Stolberglaan 24, NL-2263VA

[Continued on next page]

- (54) Title: NOVEL BACILLUS mHKcel CELLULASE

ORF Nucleotide sequence of mHKcel cellulase gene

ATGGGTTATA CCCAAGCTAA GTGTATGGTG AAAAAACGG TCTTGTGTTGG 50
TTTAATTCTC TGTTTAGGTG TGTCAATGTT TGTACCAGTT ACATCAGCTG 100
AAGATAGGGT CTCCTCGTCA CAGGTGGATA TCCAATCATA TGTAGCAGAT 150
ATGCAACCTG GCTGGAATTT AGGTAATACA TTTGATGCGA TAGGAGATGA 200
TGAAACAGCA TGGGGAAACC CTCGTGTAAC GAGAGAATTA ATAGAATGA 250
TTGCTGATGA AGGGTATAAA AGTATTCGTA TCCAGTCAC ATGGCAAAAT 300
CAATGGGTG GTTCTCCAGA TTATACAAAT AATGARGATT ATATCAGCGG 350
GGTAGAGCAA GTGATAGATT GGGCGTTGGA GGAAGACTTG TATGTGATGT 400
TAAATGTGCA TCATGACTCA TGGCTGTGGA TGTATGATAT GGAACATAAC 450
TATGATGAGG TGATGGCAAG ATATACAGCT ATTGCGGAAC AATTGTGCGA 500
AAATTCAAA AACCACTCCC ATAAGTTGAT GTTTGAGAGT GTCAATGAGC 550
CTAGGTTTAC GCAGGAGTGG GGAGAGATTG AAGAAAATCA TCATGCTTAC 600
TTAGAAAGATT TAAATAAGAC GTTCTATTAT ATTGTACAGG AGTCAGGAGG 650
CAATAATGTG GAGCGCCCTT TAGTATIGCC TACGATAGAA ACAGCCACGT 700
CTCAGGATTT ACTAGATCGC TTGTATCAAA CAATGGAAGA CTGTGGATGAC 750
CCTCAATTAA TTGCCACGGT TCATTATTAT GGCTTTTGGC CCTTATGTT 800
CAATATAGCA GGGTACACCC GTTTTGAACA GGAGACACAA CAAGATATTA 850
TAGACACGTT TGACCGTGTI CATAACACAT TTACAGCGAA TGGGATCCCA 900
GTTGTATTAG GTGAATTGG TTTGTTAGGC TTTGATATAA GTACGGACGT 950
CAITTCAGCA GGTGAGAAAT TAAAATTTT TGAGTTTCTC ATCCATCATC 1000
TCAATGAACG TGATATAACC CATATGTTAT GGGATAACGG TCAGCATTTA 1050
AAGCGAGAAA CTTATTCAAT GTATGATCAG GAATTTCAAT ACATATTAAA 1100
AGCGAGTTGG GAGGGGCGTT CTGCTACAGC TGAGTCTAAT TTCAITTCATG 1150
TGAAGGACGG AGAGCCCAAT AGAGATCAAC ATATACAGCT TCACTTAAC 1200
GGAAATGAGC TAACTGOCCT ACAGGCAGGG GACGAATCGC TTGTACTAGG 1250
AGAGGATTAT GAGCTAGCAG GAGACGTATT AACGCTAAAA GCGGGCATCC 1300
TCACAGGATT AATTACOCCT GGCCAAATTAG GAACGAATGC GGTCAATCACA 1350
GCTCAATTAA ATTCTGGAGC AGACTGGCGT TTCAATTAC AGAATGTGGA 1400
CGTGCCRAACA GTCGAAAATA CAGATGGCTC AATATGGCAT TTTGCGATCC 1450
CTACCCATTT TAATGGTGAT AGTCTTGCGA CGATGGAAGC TGTATTATGCA 1500
AAGCGAGAAAT ATGCTGGCCC GCAGATTGG ACGTCATTTA AAGAATTTGG 1550
CGAGGCGTTT TCCCTTAATT ACGCCACAGG GGAAATTAAT ATAACAGAAG 1600
CCTTCTTTAA CGCGGTACGG GATGATGATA TCCATTTAAC ATTTCAATTAT 1650
TGGAGCGGAG AGACGGTGGG ATATACATTA CGTAAAAATG GAAATTAATG 1700
TCAAGGTAGA CCGTAA 1715

- (57) Abstract: The present invention provides a novel cellulase nucleic acid sequence, designated mHKcel, and the corresponding mHKcel amino acid sequence. The invention also provides expression vectors and host cells comprising a nucleic acid sequence encoding mHKcel, recombinant mHKcel proteins and methods for producing the same.

WO 2004/099370 A2